

Justice Studies Department
San Jose State University
Fall 2006
Class hours TTh 1030-1145
Room: MH 520

Instructor: Mary Juno
Office Hrs: Tues Noon - 2pm
Set by appointment via email
Email: junos68@yahoo.com

**JS 112
Criminalistics**

Course Description:

Course Objective

This course covers fundamental theories of physical evidence, practically applied, and the legal considerations involved in its recognition, collection, preservation and presentation in court. Students will learn the appropriate methods for securing and processing different types of crime scenes, as well as how to search for and document evidence. Topics include latent fingerprints, scene photography, impression evidence, firearms, questioned documents, trace evidence, and death investigations.

Course Text and materials: Spartan Bookstore

Required Texts:

Techniques of Crime Scene Investigation, Seventh Edition. 2004 Barry Fisher. ISBN084931691X, 544 pages. CRC Press

Criminalistics 112 Course Reader

Required reading and internet materials:

Journal articles and other readings will be accessible at the SJSU library, on reserve, or will be accessible on line. Citations and URLs for on line materials will be provided in assignments. The web sites we will use include the following

- National Criminal Justice Reference Service:
<http://www.ncjrs.org/>
- Fingerprints: <http://www.fbi.gov/hq/cjisd/ident.htm>
- Crime Scene Investigation: <http://www.crime-scene-investigator.net/>
- CA Dept of Justice Physical Evidence Bulletins:
<http://www.cci.ca.gov/Reference/pehb/peb.html>, and other forensic science web sites will be required reading.

Supplementary Texts (Optional)

Course material may include citations from the following:

Forensic Science: An Introduction to Scientific and Investigative Techniques. 2nd Edition. 2005. Stuart H. James and Jon J. Nordby eds., ISBN: 0849327474. CRC Press

Police Photography, 5th Edition. 2006. Larry Miller. ISBN 1593452918. Anderson Publishing.

Interpretation of Bloodstain Evidence at Crime Scenes, 2nd Edition. 1999. Stuart H. James, William G. Eckert. ISBN: 0849381266. CRC Press.

POST Learning Domain 30, Preliminary Investigation, Version 3. 2006. California Commission on Peace Officer Standards & Training (POST).
<http://www.post.ca.gov>

Processing Guide for Developing Latent Prints. 2000. Federal Bureau of Investigation.

Criminalistics: An Introduction to Forensic Science (College Version), 8/E, Copyright 2004, published 6-18-2003, RE. Saferstein, Ph.D., ISBN: 0-13-111852-8, Prentice Hall.

Course Format:

The course will include lectures by the instructor, guest lectures, films, discussions, small group activities, and hands-on exercises. Texts will be supplemented with online readings and handouts.

Course Requirements:

Exams: Two exams will be given in this course. Exams will be cumulative and will include all material covered up to the date of the exam. Exams may include multiple choice, matching, true/false, short answer, diagrams, drawings and sketches, short essay and/or long essay.

Midterm	Tuesday Oct 10 regular class period
Final	Tuesday Dec 12 9:45-12noon

Quizzes: Quizzes on assigned readings, laboratories, small group activities and other assigned materials will be given during the semester. These will generally be multiple choice, matching, true/false and short answer but may also include essay questions. Quizzes will be given announced as well as unannounced. Each quiz may cover material that is assigned in the reading as well as material covered in the lectures and reading for previous days.

Homework: Homework in the form of questions or short papers based on readings will be assigned throughout the term.

Crime Scene Reports: There will be 5 crime scene processing activities held during the semester. These will include scene diagrams, latent fingerprints, photography, blood stain pattern interpretation, and a mock crime scene. Written reports and project materials will be due for each.

General Writing Requirements: Students have differing writing talents, abilities and skills. At the college level, you should be able to express yourself in writing clearly, concisely, and effectively, without grammar, punctuation or spelling errors. Any job you seek in this field will expect no less of you! Your writing assignments for this class will be graded for content *as well as clear and correct expression*, so please remember to:

- Spell check
- Proofread
- Be sure your answer fully addresses the question being asked
- Use proper APA citation format when necessary

Guidelines for Reports: All reports must contain the following sections: Abstract, Introduction, Materials and Methods, Results, Discussion with Conclusions, References, and Appendices with raw data. All pages must be numbered, initialed and dated and all materials must be firmly secured in the notebooks using a tape seal that has been initialed and dated.

CSI Exercise reports 1-4 are worth 25 points each. The final CSI exercise report is worth 100 points and will include a team presentation. Reports will be graded using both administrative and technical criteria. Details of format and grading of the reports will be provided at the first crime scene session. Grading in general includes the following considerations

- **Administrative Criteria**
 - Is the notebook bound?
 - Is the chain of custody completed for any evidence transfers and documented appropriately?
 - Are proper citations and acknowledgements documented for other individual's work (e.g. citations/references/teammates whole names)?
 - Is the evidence, properly sealed and stored where indicated?
 - Is the documentation complete?
 - Are all pages numbered, dated and initialed? Is all data properly and securely inserted into the notebooks?
 - Where assigned, do the reports address the questions provided?
 - Are the reports organized with all sections?
 - Is the writing clear and legible?
 - Were all directions followed?

- **Technical and Scientific Criteria**
 - Are data tabulated/summarized and analyzed accurately?
 - Does the data support the statements in the reports?
 - Are the statements within the report and between team members consistent? If not, are discrepancies explained?
 - Is the technical detail provided sufficient and understandable for court?
 - Would the CSI be able to reconstruct the crime scene years from now, based on the documentation?

Grading

Quizzes (3x20pts)	60 points
Homework	40 points
CSI Exercises (4x25pts)	100 points
Final CSI Exercise	100 points
Midterm	100 points
<u>Final exam</u>	<u>100 points</u>
Total required	500 points

Extra Credit

An extra credit writing assignment may be offered as well.

Grading Policies

Make-up exams will not generally be permitted. However, under extraordinary circumstances, with proper documentation and approval by the instructor, a 15 page single-spaced term paper of an instructor assigned topic may substitute for 1 exam.

	From	To
A+	483.5	500
A	467	483.4

C+	383.5	399.9
C	367	383.4
C-	350	366.9

A-	450	466.9
B+	433.5	449.9
B	417	433.4
B-	400	416.9

D+	333.5	349.9
D+	317	333.4
D-	300	316.9
F	<300	

Instructor

Mary Juno holds an MS in Forensic Science from the University of Strathclyde in Glasgow, Scotland, and a BA in Forensic Anthropology from San Francisco State University. Juno has worked as a CSI at the Oakland Police Department since 2000, and has processed hundreds of major crime scenes. She has taught in the Police Academy and serves as adjunct faculty at Kaplan University and National University.

Course Add/Drop Statement

Instructors are permitted to drop students who fail to attend the first scheduled class meeting and who fail to inform the instructor prior to the second class meeting of the reason for any absence and their intention to continue in the class. Some instructors will drop students who do not meet the stated course prerequisites. However, instructors are not required to drop a student from their course. ***It is the student's responsibility to make sure classes are dropped.***

You, the student, are responsible for understanding the policies and procedures about add/drops, academic renewal, withdrawal, etc. found at: http://sa.sjsu.edu/student_conduct

Academic Integrity Statement

Academic integrity is essential to the mission of San José State University. As such, students are expected to perform their own work (except when collaboration is expressly permitted by the course instructor) without the use of any outside resources. Students are not permitted to use old tests, quizzes when preparing for exams, nor may they consult with students who have already taken the exam. When practiced, academic integrity ensures that all students are fairly graded. Violations to the Academic Integrity Policy undermine the educational process and will not be tolerated. It also demonstrates a lack of respect for oneself, fellow students and the course instructor and can ruin the university's reputation and the value of the degrees it offers. We all share the obligation to maintain an environment which practices academic integrity. Violators of the Academic Integrity Policy will be subject to failing this course and being reported to the Office of Student Conduct & Ethical Development for disciplinary action which could result in suspension or expulsion from San José State University. The policy on academic integrity can be found at: http://sa.sjsu.edu/student_conduct

To better understand plagiarism and to aid you in making sure that you are not plagiarizing, please see me and/or visit:

<http://tutorials.sjlibrary.org/plaqaarism/index.htm>

American with Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires students with disabilities requesting accommodations must register with DRC to establish a record of their disability.

Justice Studies Department

Course Schedule (subject to change)

Dates Topics

Week 1: Aug 24

Introduction to Crime Scene Investigation

Syllabus, Reading material

Introductions: Your background, my background.

Course Description, requirements, grading etc.

Form crime scene teams. Swap emails/phone numbers.

Topics

- Goals of crime scene investigation
- Nature and value of physical evidence
- Qualities of a CSI
- Importance of quality reports

Assignments

Read Fisher Ch 1-3

Read Houck Article

Sign in -- send me an email with subject heading "JS112".

Purchase individual CSI kit materials

Take Plagiarism tutorial and quiz. Bring hard copy of quiz results to next class meeting.

<http://tutorials.sjlibrary.org/plagiarism/index.htm>

Week 2: Aug 29/31

Crime Scene Initial Response

Topics

- Securing the scene
- Locating & identifying physical evidence
- Fragile evidence & its protection
- Initial observations
- Surveys/walk-throughs/systematic searches
- Sources of information at the scene
- Relationships & context of evidence - deciding what is important at a scene and what is not
- Required equipment

Assignments

Read <http://www.ncjrs.gov/pdffiles1/nij/200160.pdf>

Read Fisher Appendix A

Reader Ch 10

Homework: Do questions at end of Ch 10 in Reader due Sept 5

Week 3: Sept 5/7

Methods of Scene Documentation

Crime Scene Diagrams

Topics

- Note-taking
- Reports
- Photography
- Video
- Evidence
- Diagrams

Crime Scene Exercise 1: due Sept 19

Assignments

Read Fisher Ch 4 & 5

Week 4: Sept 12/14

Juno will be away this week.

Film:

Assignments

Meet with CSI team & complete diagrams

Week 5: Sept 19/21

Forensic Evidence

Topics

- Identification and individualization
- Class & individual characteristics of evidence
- Physical fit/matching
- Handling & packaging evidence
- Controls/standards
- Chain of custody

Assignments

Reader Ch 12 & 33

Homework: Do questions at end of Ch 33 in Reader **due Sept 26**

Quiz #1

Week 6: Sept 26/28

Latent Fingerprints

Topics

- History of Fingerprints
- Basis for Identification
- Will West case
- Types of prints
- Pattern types

- Where to look for fingerprints at a scene
- Surface considerations
- Processing techniques (field vs lab)
- Taking elimination prints

Assignments

Read Fisher pp 93-114, 124-128

Reader: All FP handouts, Ch 17

Homework: Do questions at the end of Ch 17 in Reader **due Oct 3**

Download/Read PDF: FBI Latent Print Guide (email from instructor)

Week 7: Oct 3/5

Latent Fingerprints, cont.

Topics

- Quality of latent lifts
- How an identification is made
- Automated FP systems -- CAL ID/ALPS
- Other methods of identification

Assignments

Read Fisher pp 128-142

Crime Scene Exercise 2: due Oct 10

Review for Midterm

Week 8: Oct 10/12

Midterm Oct 10

Impression Evidence: Footwear, Tire Tracks, Toolmarks, Bitemarks

Topics

- Value of Impression Evidence
- Different types of impression evidence
- Documentation -- photography, casting
- Comparisons

Assignments

Read Fisher Ch 9

Reader Ch 18, 19

Homework: Do questions at the end of Reader Ch 18 **due Oct 17**

Week 9: Oct 17/19

Impression Evidence, cont. & Firearms

Topics

- Casting footwear & toolmarks
- Characteristics & nomenclature of firearms
- Ammunition and firearms evidence
- Gunshot residue analysis
- Collection & handling of firearms evidence
- Comparisons

Assignments

Read Fisher Ch 10
Reader Ch 20

Crime Scene Exercise 3: due Oct 24

Week 10: Oct 24/26

Questioned Documents / Trace Evidence

Topics

- Theory of Handwriting
- Collection of Writing Standards
- Signatures
- Typewriters, Printers, Photocopiers
- Examination & Comparisons
- Paint
- Soil
- Hairs & Fibers
- Glass

Assignments

Reader Ch 21 & Handouts
Read Fisher Ch 7
Reader Ch 16

Quiz #2

Week 11: Oct 31/Nov 2

Blood & Blood Stain Pattern Analysis

Topics

- Safety Precautions
- Presumptive tests for blood
- Recording of bloodstains
- Collection & preservation of blood/bloody clothing
- Objectives of BPA
- Blood stain pattern analysis (PPT)

Assignments

Read Fisher Ch 8
Reader Ch 11, Appendix B, & Glossary

Crime Scene Exercise 4: due Nov 7

Week 12 Nov 7/9

**Specific Types of Crimes: Arsons
Burglaries
Sexual Assaults**

Topics

- Objectives of arson investigation
- Challenges & difficulties
- Collection & preservation of physical evidence
- Origin & cause analysis
- Incendiary devices
- Explosives/Bomb scene investigation

- Three kinds of burglars
- Point & method of entry
- Thinking like a burglar
- Types of evidence encountered at burglaries

- Interviewing the victim
- Medical exams
- Collection of evidence
- Biological evidence

Assignments

Read Fisher Ch 14

Reader Ch 14 & 24

Homework: do questions at the end of Reader Ch 24 **due Nov 14**

Week 13 Nov 14/16

Specific Types of Crimes: Death Scenes

Topics

- Deaths: natural, accidental, intentional
- Suicides: what to look for
- Murder
- Luci Houston case
- Signs of struggle
- Autopsy findings

Assignments

Read Fisher Ch 16

Quiz #3

Week 14 Nov 21/Thanksgiving

Crime Scene Photography

Topics

- Writing with light
- 35mm camera & crime scene photography (PPT)
- Video recording
- Orientation/midrange/close up photos
- Flash photography
- Painting with light
- Digital cameras/issues

Assignments

Reader Ch 10 p 174-175

Read Handouts

Week 15 Nov 28/30

Crime Scene Investigation

Topics

- Putting it all together
- Mock crime scenes

Crime Scene Exercise 5: due Dec 7

Week 16 Dec 5/7

Team presentations

Topics

- The CSI effect
- Ethics
- Court testimony

Assignments

Review for Final

Week 17 Dec 12

Final

CSI Kit

For each person

Bound notebook with page numbers
Tape measure
Ruler and protractor (with metric and inches)
Graph paper (10 sheets)
Permanent sharpie markers (black or blue)
Pens (ball points) & pencils

For each team

Manilla envelopes (5x7, 8x10, coin envelopes - 5 of each size)
Clear packing tape with dispenser
35 mm camera with 3 rolls of film or Digital Camera
Q-tips (box)
Labels (white, adhesive)
Paper bags (various sizes, inc large grocery bags - 10 total)
Plastic ziplock bags (various sizes - 10 total)
Tweezers
Scissors

I will provide

Fingerprint brushes, powder, tape, cards, ink
Blood

Casting materials
Knife
Latex gloves
Masks
Alcohol wipes
Cleaning solutions
Distilled water

Crime Scene Exercises

1. **Sketches** **Due Sept 19**
 Bird's Eye
 Exploded View
 Elevation
 Vehicle

2. **Fingerprints** **Due Oct 10**
 Roll each other's prints
 Dust for prints

3. **Casting** **Due Oct 24**
 Shoe Impressions

4. **Blood Stain Pattern Analysis** **Due Nov 7**
 Student Designed Experiments

5. **Mock Crime Scene** **Due Dec 7**
 Evidence List & Measurements
 Diagram
 Photos
 Fingerprints
 Swabs
 Report

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Week 8: Oct 10/12

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Week 10: Oct 24/26

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- Glass

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Reader Ch 16

Quiz #2

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- Collection & preservation of blood/bloody clothing
- Objectives of BPA
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Assignments

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Reader Ch 11, Appendix B, & Glossary

Crime Scene Exercise 4: due Nov 7

Week 12 Nov 7/9

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Topics

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Team presentations

Topics

- The CSI effect
- Ethics
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Assignments

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For each team

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35 mm camera with 3 rolls of film or Digital Camera
Q-tips (box)
Labels (white, adhesive)
Paper bags (various sizes, inc large grocery bags - 10 total)
Plastic ziplock bags (various sizes - 10 total)
Tweezers
Scissors

I will provide

Fingerprint brushes, powder, tape, cards, ink
Blood

Casting materials
Knife
Latex gloves
Masks
Alcohol wipes
Cleaning solutions
Distilled water

